

Bits

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Version				Header Length				Type of Service								Total Packet Length															
Sequence Number																Flags				Fragment Offset											
Time to Live								Protocol								Header Checksum															
Switching, Path and Channel Identifiers																															
Packet Type, QoS, Security and Network Management Identifiers and Values																															
Options (if any)																															
Data (if any)																															

Figure 1. Representative Description of the IPv4 Header for VIPS

Figure 2. Representative Configuration of a VIPS Packet

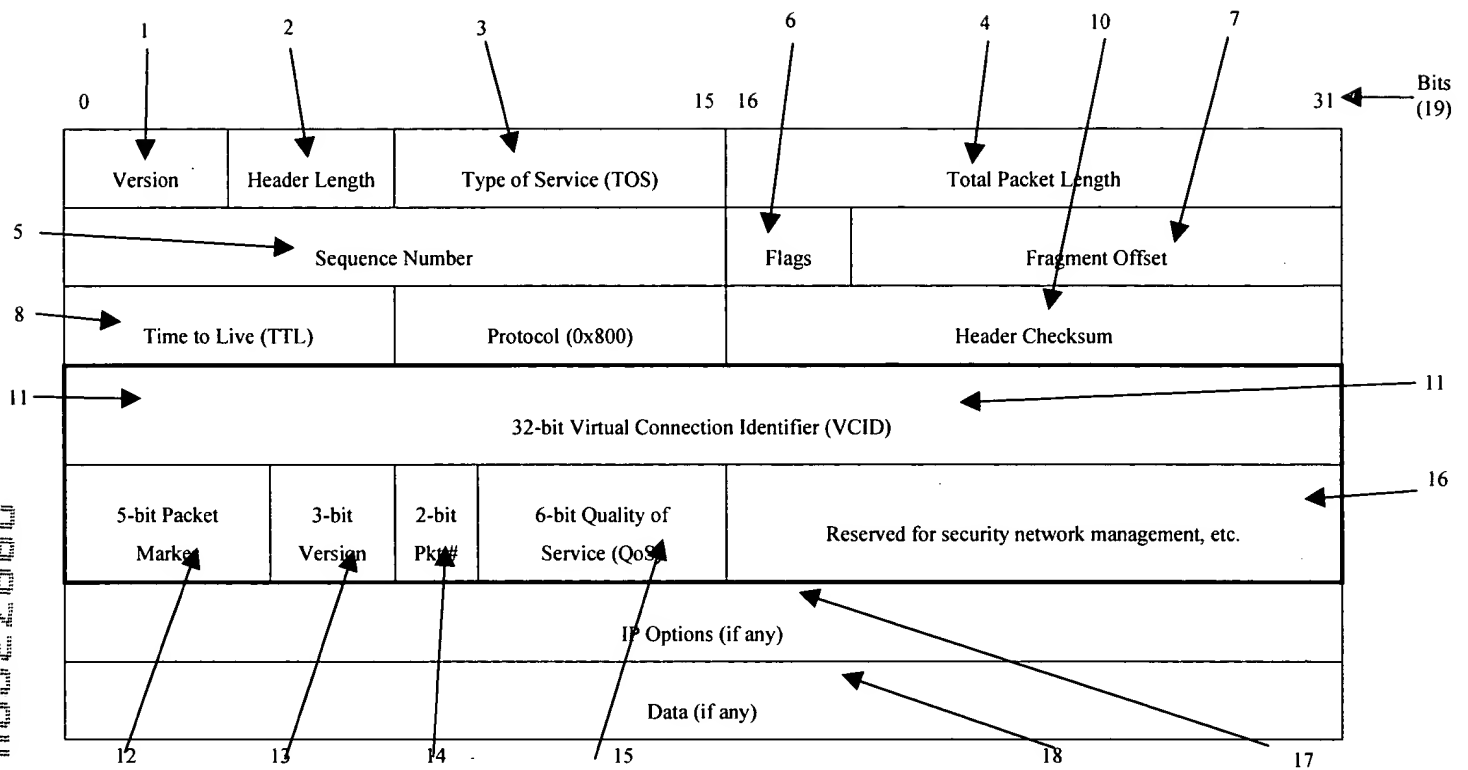


Figure 2. Representative Configuration of a VIPS Packet

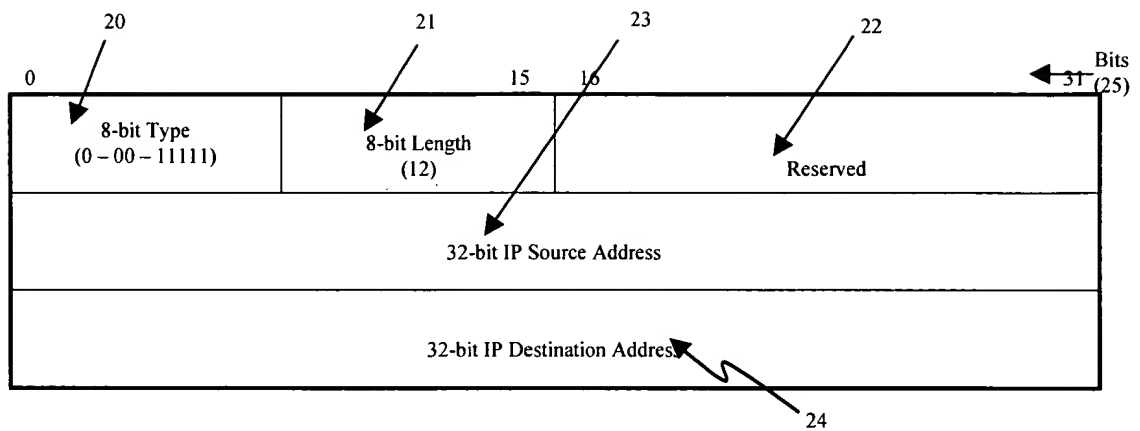


Figure 3. Representative First or Lead Packet IP Option

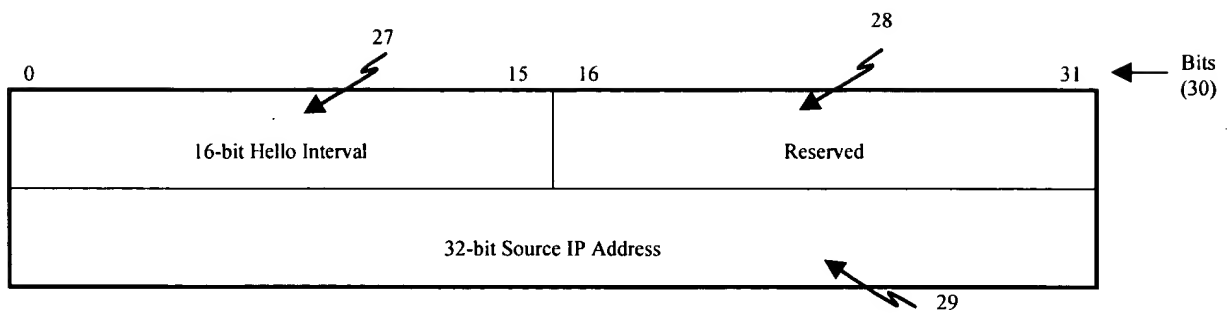


Figure 4. Representative Hello Packet Payload

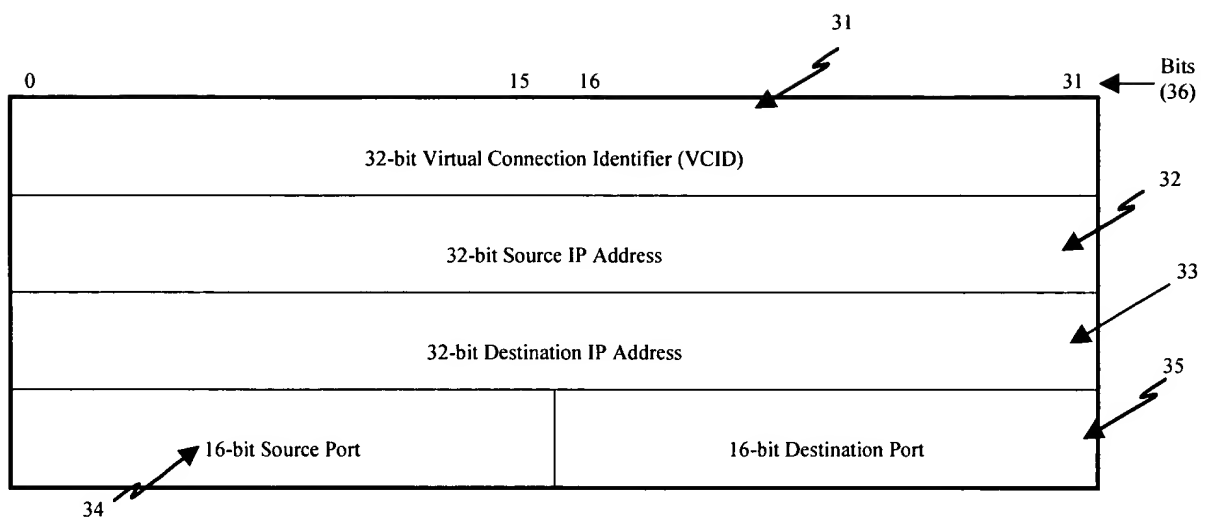


Figure 5. Representative CACK Packet Payload

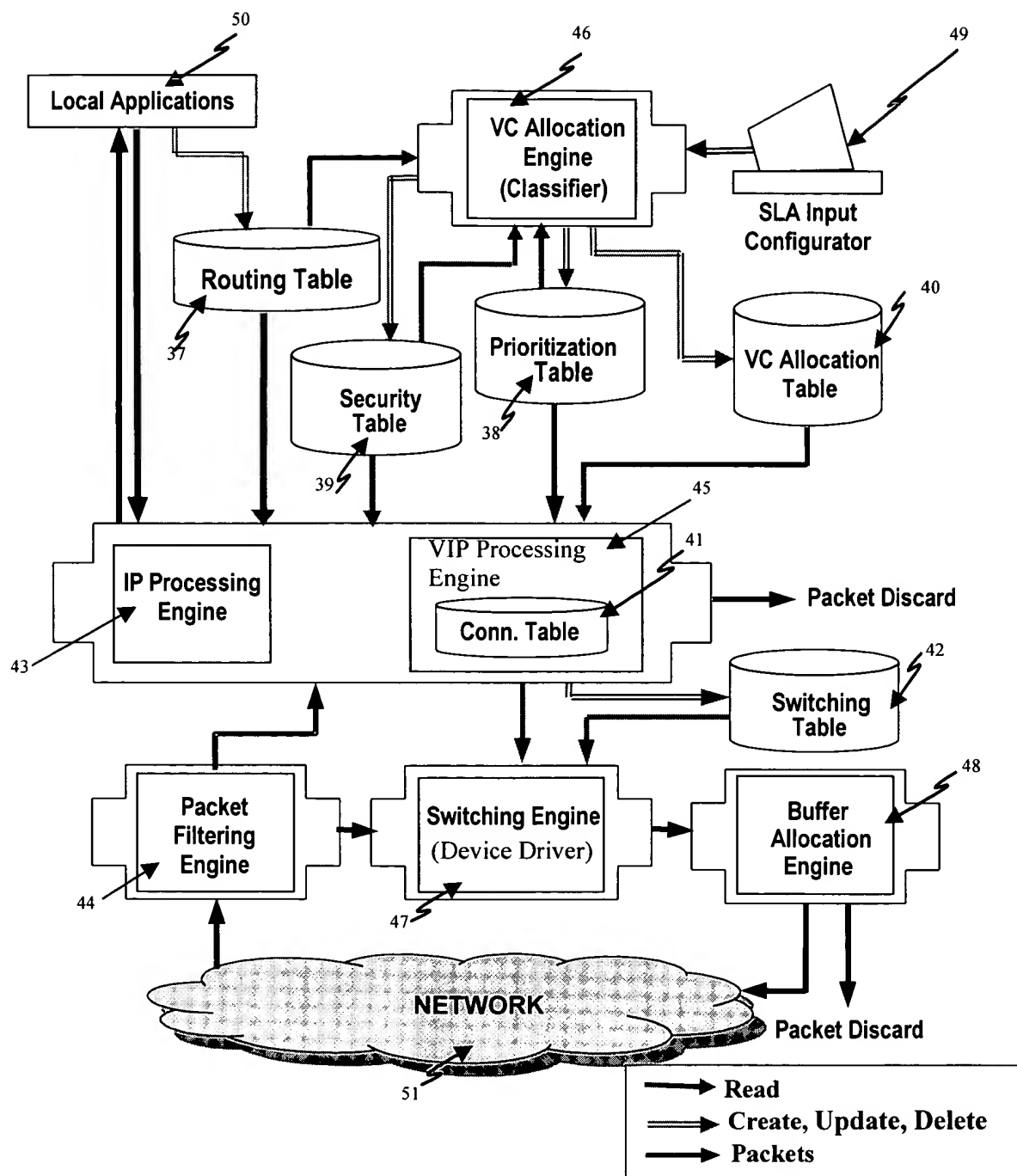


Figure 6. Representative Functional Details

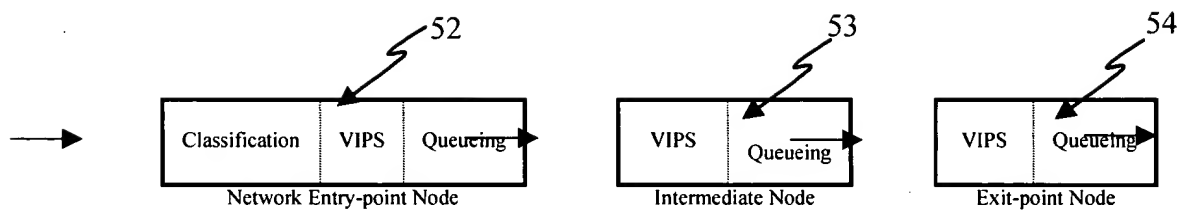


Figure 7. Representative Packet Queuing Concepts

Diagram illustrating a packet scheduler with 8 priority classes and an unallocated section. The total bandwidth is divided into 9 equal segments (10% each).

Priority 1: High priority classes can be used to support traffic with stringent QoS requirement such as voice. These classes may be configured to reserve bandwidth for their own use (isolated) and borrow unused/unallocated bandwidth.

Priority 2:

Priority 3:

Priority 4:

Priority 5:

Priority 6:

Priority 7: Low priority classes can be used to support traffic with no and/or low QoS requirement such as email or ftp. These classes may be configured to only use bandwidth allocated for them (bounded).

Priority 8:

Unallocated: Unallocated bandwidth can be used by any of classes that are not bounded. The allocation is based on borrowing class priority and weight.

Total Bandwidth

8